

THAT WHICH IS CLAIMED IS:

1. A method of communicating with a wireless terminal, the method comprising:

communicating between the wireless terminal and a first node according to a first radio configuration of a first set of radio configurations supported by the first node;

identifying a second radio configuration available for a second node that supports a second set of radio configurations that is different from the first set of radio configurations; and

simultaneously communicating between the wireless terminal and respective ones of the first and second nodes according to the identified second radio configuration.

2. A method according to Claim 1, wherein a first one of the first and second sets of radio configurations is constrained to radio configurations that are compliant with a wireless communications standard, and wherein a second one of the first and second sets of radio configurations comprises radio configurations compliant with the wireless communications standard and radio configurations that are non-compliant with the wireless communications standard.

3. A method according to Claim 1, wherein a first one of the first and second sets of radio configurations is constrained to IS-95 compliant radio configurations, and wherein a second one of the first and second sets of radio configurations includes IS-2000 compliant radio configurations that are non-compliant with IS-95.

4. A method according to Claim 1, wherein simultaneously communicating between the wireless terminal and respective ones of the first and second nodes comprises transmitting information to the wireless terminal from the first and second nodes using a common channel coding.

5. A method according to Claim 4, wherein simultaneously communicating between the wireless terminal and respective ones of the first and second nodes according to the second radio configuration further comprises:

- 5 receiving first and second signals transmitted from respective ones of the first and second nodes at the wireless terminal; and
5 processing the first and second signals according to a common process.

6. A method according to Claim 5:

- 10 wherein receiving first and second signals transmitted from respective ones of the first and second nodes at the wireless terminal comprises receiving a composite signal including the first and second signals; and

wherein processing the first and second signals according to a common process comprises processing the composite signal according to a RAKE process.

- 15 7. A method according to Claim 1, wherein the first and second radio configurations comprise code division multiple access (CDMA) radio configurations.

- 20 8. A method according to Claim 1, wherein the first node supports a first set of radio configurations and wherein the second node supports a second set of radio configurations that includes only a subset of first set of radio configurations.

- 25 9. A method according to Claim 1, wherein the first node supports a first set of radio configurations, wherein the second node supports a second set of radio configurations, and wherein the first set of radio configurations includes only a subset of the second set of radio configurations.

10. A method according to Claim 1, wherein identifying a second radio configuration available for a second node is proceeded by identifying the second node as a best candidate node according to a predetermined criterion.

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11. A method according to Claim 1, wherein simultaneously communicating between the wireless terminal and respective ones of the first and

second nodes according to the second radio configuration is preceded by requesting communication according to the second radio configuration from the wireless terminal.

5 12. A method according to Claim 1, wherein simultaneously communicating between the wireless terminal and respective ones of the first and second nodes according to the second radio configuration is preceded by commanding the wireless terminal to communicate according to the second radio configuration.

10 13. A method according to Claim 1, wherein simultaneously communicating between the wireless terminal and respective ones of the first and second nodes according to the second radio configuration is followed by terminating communications between the wireless terminal and the first node while continuing communications between the wireless terminal and the second node.

15 14. A method of performing handoff of a wireless terminal from a first base station supporting a first set of radio configurations to a second base station supporting a second set of radio configurations that is different than the first set of radio configurations, the method comprising:

20 determining whether a common radio configuration is available for the first and second base stations; and

handing off the wireless terminal from the first base station to the second base station based on the determination of whether a common radio configuration is available for the first and second base stations.

25 15. A method according to Claim 14, wherein a first one of the first and second sets of radio configurations is constrained to radio configurations that are compliant with a wireless communications standard, and wherein a second one of the first and second sets of radio comprises radio configurations that are compliant with 30 the wireless communications standard and radio configurations that are non-compliant with the wireless communications standard.

16. A method according to Claim 14, wherein a first one of the first and second sets of radio configurations is constrained to IS-95 compliant radio configurations, and wherein a second one of the first and second sets of radio configurations includes IS-2000 compliant radio configurations that are non-compliant with IS-95.

17. A method according to Claim 14, wherein handing off the wireless terminal from the first base station to the second base station based on the determination of whether a common radio configuration is supported by the first and second base stations comprises performing a soft handoff of the wireless terminal using the common radio configuration.

18. A method according to Claim 17, wherein performing a soft handoff of the wireless terminal using the common radio configuration comprises:

15 changing the radio configuration used for communications between the first base station and the wireless terminal to the common radio configuration; and then communicating between the second base station and the wireless terminal according to the common radio configuration.

20 19. A method according to Claim 17, wherein performing a soft handoff of the wireless terminal using the common radio configuration comprises transmitting information to the wireless terminal from the first and second base stations using a common channel coding.

25 20. A method according to Claim 19, wherein performing a soft handoff of the wireless terminal using the common radio configuration further comprises:

receiving first and second signals transmitted by respective ones of the first and second base stations at the wireless terminal; and
processing the first and second received signals according to a common process.

30 21. A method according to Claim 20:

wherein receiving first and second signals transmitted by respective ones of the first and second base stations at the wireless terminal comprises receiving a composite signal including the first and second signals; and

5 wherein processing the first and second received signals according to a common process comprises processing the composite signal according to a RAKE process.

22. A method according to Claim 14, wherein handing off the wireless terminal from the first base station to the second base station based on the 10 determination of whether a common radio configuration is available for the first and second base stations comprises performing a hard handoff from the first base station to the second base station if a common radio configuration is not available.

23. A method according to Claim 14, wherein the common radio 15 configuration comprises a code division multiple access (CDMA) radio configuration.

24. A wireless communications system, comprising:
a first node operative to communicate with a wireless terminal according to any of a first set of radio configurations; and
20 a radio configuration control circuit operative to identify a common radio configuration of the first set of radio configurations that is also a member of a second set of radio configurations supported by a second node and to responsively cause the first and second nodes to simultaneously communicate with the wireless terminal according to the identified common radio configuration.

25. A system according to Claim 24, wherein a first one of the first and second sets of radio configurations is constrained to radio configurations that are compliant with a wireless communications standard, and wherein a second one of the first and second sets of radio configurations comprises radio configurations that are compliant with the wireless communications standard and radio configurations that are non-compliant with the wireless communications standard.

26. A system according to Claim 24, wherein a first one of the first and second sets of radio configurations is constrained to IS-95 compliant radio configurations, and wherein a second one of the first and second sets of radio configurations includes IS-2000 compliant radio configurations that are non-compliant with IS-95.

27. A system according to Claim 24, wherein the radio configuration control circuit is operative to command the wireless terminal to communicate with the first and second nodes according to the identified common radio configuration responsive to identification of the common radio configuration.

28. A system according to Claim 24, wherein the radio configuration control circuit is operative to receive a request from the wireless terminal to communicate with the first base node according to the common radio configuration and to responsively cause the first node to change its communications with the wireless terminal to conform to the common radio configuration.

29. A system according to Claim 24, wherein the set of radio configurations comprises a set of code division multiple access (CDMA) radio configurations.

30. A system according to Claim 24, wherein the first node comprises a base station.

25 31. A system according to Claim 24, wherein the radio configuration control circuit is positioned at a mobile switching center.

32. A wireless terminal, comprising:
a transceiver circuit operative to communicate according to a set of radio configurations; and
a radio configuration control circuit coupled to the transceiver circuit and operative to cause the transceiver circuit to communicate with a first node using first

radio configuration of the set of radio configurations, to identify a second radio configuration of the set of radio configurations supported by a second node, and to responsively cause the transceiver circuit to simultaneously communicate with respective ones of the first and second nodes according to the second radio configuration.

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33. A terminal according to Claim 32, wherein the radio configuration control circuit is operative to cause the transceiver circuit to transmit a request to simultaneously communicate with the first and second nodes.

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34. A terminal according to Claim 32, wherein the radio configuration control circuit is operative to cause the transceiver circuit to simultaneously communicate with the first and second nodes responsive to a command received by the transceiver circuit.

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35. A terminal according to Claim 32, wherein the set of radio configurations comprises a set of code division multiple access (CDMA) radio configurations.

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~~36.~~ A system, comprising:

means for communicating between a wireless terminal and a first node according to a first radio configuration of a first set of radio configurations supported by the first node;

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means for identifying a second radio configuration available for a second node that supports a second set of radio configurations that is different from the first set of radio configurations; and

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means, responsive to the means for identifying a second radio configuration available for a second node that supports a second set of radio configurations that is different from the first set of radio configurations, for simultaneously communicating between the wireless terminal and respective ones of the first and second nodes according to the identified second radio configuration.

37. A system according to Claim 36, wherein a first one of the first and second sets of radio configurations is constrained to radio configurations that are compliant with a wireless communications standard, and wherein a second one of the first and second sets of radio comprises radio configurations compliant with the 5 wireless communications standard and radio configurations that are non-compliant with the wireless communications standard.

38. A system according to Claim 37, wherein a first one of the first and second sets of radio configurations is constrained to IS-95 compliant radio 10 configurations, and wherein a second one of the first and second sets of radio configurations includes IS-2000 compliant radio configurations that are non-compliant with IS-95.

39. A system according to Claim 37, wherein the first and second radio 15 configurations comprise code division multiple access (CDMA) radio configurations.

~~40.~~ A system, comprising:
means for determining whether a common radio configuration is available for first and second base stations, the first base station supporting a first set of radio 20 configurations and the second base station supporting a second set of radio configurations that is different than the first set of radio configurations; and
means, response to the means for determining whether a common radio configuration is available for first and second base stations, for handing off the wireless terminal from the first base station to the second base station based on a 25 determination of whether a common radio configuration is available for the first and second base stations.

41. A system according to Claim 40, wherein a first one of the first and second sets of radio configurations is constrained to radio configurations that are compliant with a wireless communications standard, and wherein a second one of the 30 first and second sets of radio comprises radio configurations that are compliant with

the wireless communications standard and radio configurations that are non-compliant with the wireless communications standard.

42. A system according to Claim 40, wherein a first one of the first and
5 second sets of radio configurations is constrained to IS-95 compliant radio configurations, and wherein a second one of the first and second sets of radio configurations includes IS-2000 compliant radio configurations that are non-compliant with IS-95.

10 43. A system according to Claim 40, wherein the means for handing off the wireless terminal from the first base station to the second base station based on a determination of whether a common radio configuration is supported by the first and second base stations comprises means for performing a soft handoff of the wireless terminal using the common radio configuration.

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44. A system according to Claim 40, wherein the means for handing off the wireless terminal from the first base station to the second base station based on a determination of whether a common radio configuration is available for the first and second base stations comprises means for performing a hard handoff from the first
20 base station to the second base station if a common radio configuration is not available.

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